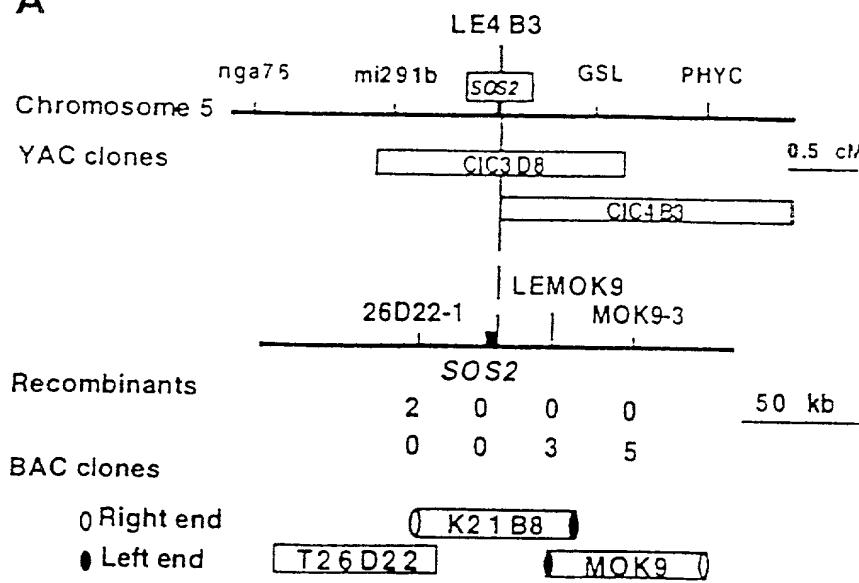


Figure 1

A



B

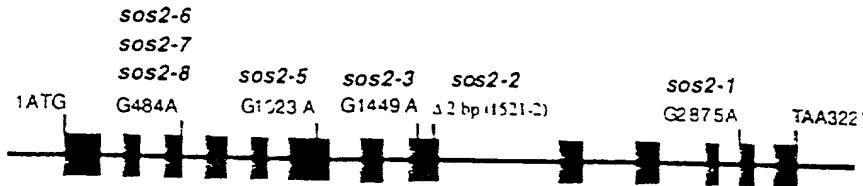


Figure 2

A

Kinase

Regulatory Domain

B

TOGATCAGATAAAAGTTTGTAAAGA

ATGACAAAGAAAATGAGAACACTGGGCAACTACCGGTTGCTGCACATAGTCAGGAACCTTGCTAAGGTTAAG
 1 M T K K M R R V G K Y E V G R T S I E T P A K K
 -- I --

TTGCGAGGACACAGACACTGCTGATAATGATGATGATGAGACTAAATTGCTAAGAGTACAATCTTAAAGAACASAATS
 27 F A R N T D T G D N V I I : I : H A K S T I L K N R M
 -- II --

GTTGTAGAGATAAAAGAGAGATACTATAATGAGATTTGCTCACCCGAAACATAGTGAGGTTTATGAGGTTG
 53 V D Q I K R I : S I M X I V R H P N I V R L Y E V I
 -- III --

GCGAGTCCTCGAAAATATATAATAGTTTGAGTTGCTACAGGAGGAGGCTTGTATGAAATTGCTATAAAAGCG
 79 A S P S K I Y I V L E F V T S G E L F D R I V H K S
 -- V --

AGGCTTGAAGAAAGTGTAGTCTCGAAAATACTTTCAACAGCTTGAGATGCTTGTATGACTGCAAGGCTTGT
 105 R L E E S E S R K Y F Q Q I V D I V A I I H C K G V
 -- VI --

TACCAAGTGCCTTAACCCAGAAAATCTTACTGATGAAATGGAATTTGAGGTTTGTGAAATTGCGACTGAGT
 131 Y I R I Y K P S I I L D T N G N L X I S I S S
 -- VII --

GCATTGCTCGAGGAGTAGAACTTGTGCTACACATGCTGAACTGAACTATGATGCTGAGGTACTTGT
 157 A L P Q E G V E L I R T T C G I P H I V I P I V L S
 -- VIII --

GGACAGGTTTACGATGGTTCAGCAGCTGATATTGCTGCGGGGTTATCTTGTGATGATGCTGGATATTIA
 183 G Q G Y D G S A A I : I S C I I L F V I L A G Y L
 -- IX --

CCTTTTCCGAGACGGATCTCCAGGTTTACAGAAAATAATGAGAGAGTTTCTTGTCCACCGTGTGTTTCC
 209 P F S E T D L P G L Y R K I N A A E F S C P P P W F S
 -- X --

GCAGAACTGAACTTTAAATACATAGGATACTTGACCCCAATCCAAAACAGTATTCAATTCAAGGAATCAAGAAA
 235 A E V K F L I H R I L D P N ? K T R I Q I Q G I K K
 -- XI --

GATCTTGGTTCAGATAATTATGCTCTATGAGGAAGGGAGAAGAGAACTGAAATTGATGATGATATTGCTGCA
 261 D P W F R L N Y V P I R A R E Z E E V N I D D I R A

GTTTTGATGGAATTGAGGGCAGTTATGAGCGAGAAATGAGAGAGAAATGATGAAAGGGCCCTGATGATGAAATGCC
 287 V F D G I E G S Y V A E N V E R N D E G P L M M N A

TTGAGATGATTACCTTATCACAGGCTTAAATTATCTGCACTATTGACAGGGACAGGATTTGTTAAAGGCA
 313 F E M I T L S Q G L N L S A L P D R R Q D F V K R Q

ACCCCTTGTGTTCTGAAGGGAACCTAGTGAGATAATTGCTAACATTGAGGCTGTAGGCAACTCAATGGGTTTAAAG
 339 T R F V S R R E P S E I I A N I E A V A N S M G F K

TCTCATACAGGAAACTTCAGACAAAGGCTGAGGGATTATCTGATGATCAAGGCGGACAGTTAGCTGTTGTGATAGAG
 365 S H T R N F K T R L E G L S S I K A G Q L A V V I E

ATTACAGGAGGTGGCACCATCGCTTITCATGGTAGACGAGAAAGGGCTGSGTGAAACTCTGAAATATCACAACTTC
 391 I Y E V A P S L F M V D V R K A A G E T L E Y H K F

TACAAGAACCTATTCGAAACTGAAAATCATATGAGGGCAACAGAGGAATACCAAAGTCAGACATTCTCAGA
 417 Y K K L C S K L E N I I W R A T E G I P K S E I L R

ACAATCACGTTTGATCCAACCTAA
 437 T I T F

Figure 3

A

SOS2	1	MTKKRMRGEGTETGTTGEGTPEKVKPARNTDTCGVAEAKIEEKSTILNEWMCD
AMPK	1	MAEKQKHGRVYIQLHAGDTLGCTFGKVKEEHQITGHKVALKIEEKQKESLDEVG
SNF1	45	SLADGAELNTQVATLGECSFGKVKEEHTCGOKVALKIEEKQKESNSDMCGA
*		
SOS2	36	IKREISIYKREPRHENIEKLYVEA-SFGKIAVYEEVGGELFRIVBKGRHEESEEREF
AMPK	61	IKREIQNLKLFRHPHIIKLYQVISAFDDEBIVYEVSGGELFDYICKHGRHEESEARLF
SNF1	101	IPEEISYIYKFRHPIHIIKLYDVKIKDELIVYVSETR-CNELEFDYIVCQDKWSECEARESF
*		
SOS2	116	QQIDMVAHCHCEGYHEDLKPEHLILLITNGKRSDFGLALPOEGVELRTIGCIPIN
AMPK	121	QQIDSAVYTHCRMVYHDLKPEHLLDQPHDIAKIADEFGLSHEMSDC-EFLRTSCGSPN
SNF1	161	QQIDSAVYTHCRMVYHDLKPEHLLDQPHDIAKIADEFGLSDWHDG-NELRTSCGSPN
*		
SOS2	176	PAPEVTSQGIESSAPDIWSOCHVILEADLTYLPSATDPLGLAKRKNRDEFFSCPPFA
AMPK	180	PAPEVTSQKLYAGPEVDIWSOCHVILEADLTYLPSATDPLPEDDDEHMTILEKKISGVFYRHNLR
SNF1	221	PAPEVTSQKLYAGPEVTSQGIVLYVMKRLPEDDDEHIVLFEHNISGVFYRHNLR?

SOS2	236	EYKFLINRHIDENIKTRICIQGHRKLEWREN
AMPK	240	SVATLMLQDPIKEQHNIKDRHEHWFRCG
SNF1	280	GAAGLIKRMILIVNPINRISQHIMQDEWFWD

B

SOS2	332	LDSEVKHOTRFVSPREPSEIYANNEAVANSTKKS---3TRIUFKTRLEGLOSSIKACQAVT
YCHK1	343	TOPPEROTRFVSPASPRETILIDHYNQSLRILAHISVTNHYVRUQTBY3TRIUFKTRLEGLOSSIKACQAVT
YCHK1	371	GRIVRKTRTFKLEPKSYQCIKRECEHNLGMQX---3FSOMNOATESTHRENNKULFK
*		
SOS2	389	LEMYEVAPS18VIVRASPTETLSEHKEKHCNLEMILWRATEGF
YCHK1	449	LELTDEGHNLLELTHKRNTHFLE2RKEFFENAVASIGKFIVLTCVSON
YCHK1	459	ENALEMD-DKILVPEEFLSHYTGIFEFKRBELKIKCKI1D1VSSQKAWUR

Figure 4

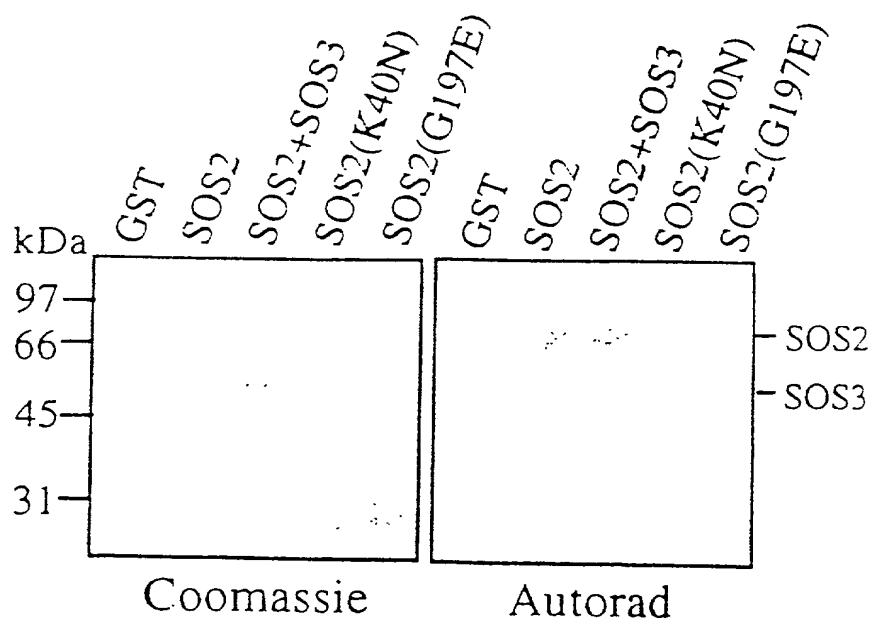


Figure 4 shows Western blot analysis of SOS2 and SOS3 expression.

Figure 5

